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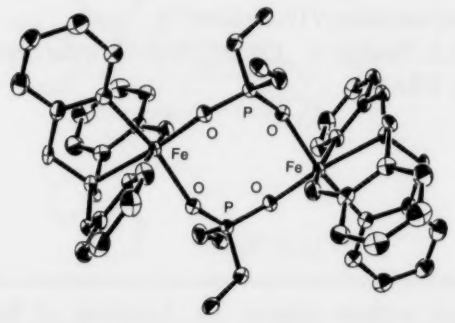

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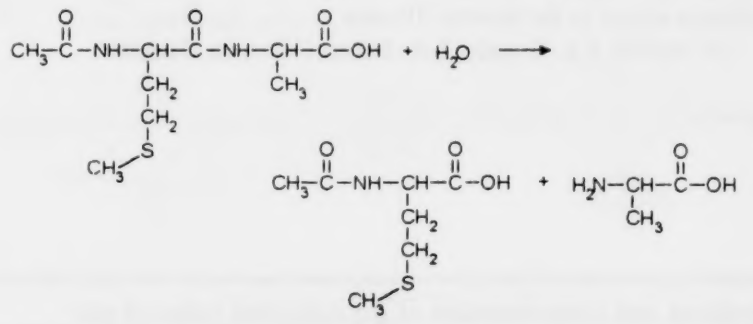

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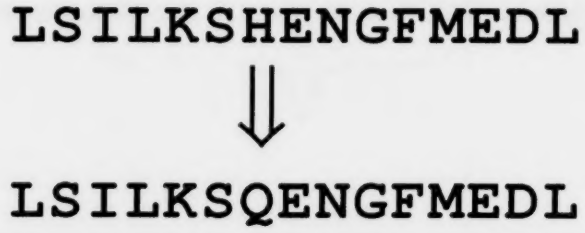

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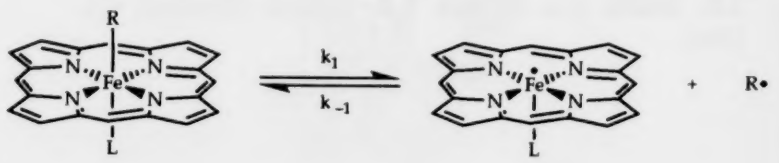

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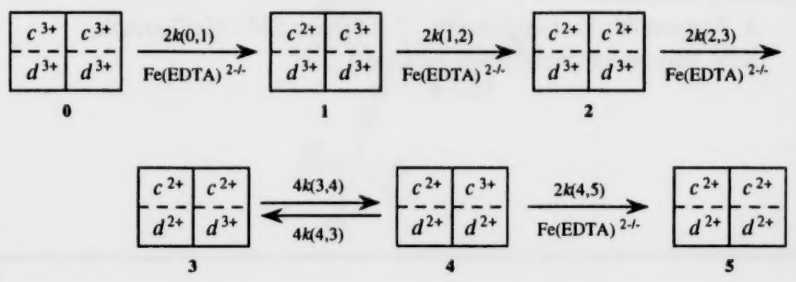

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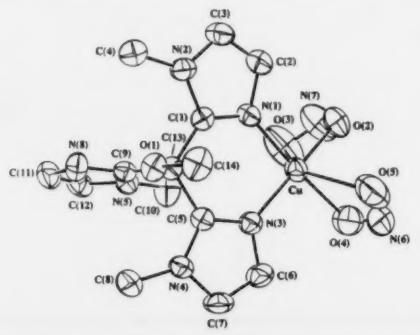
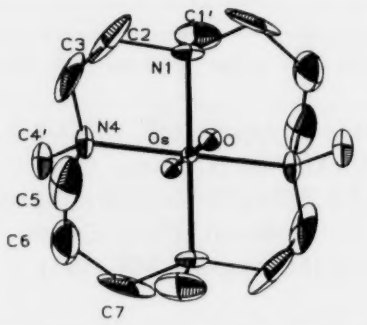
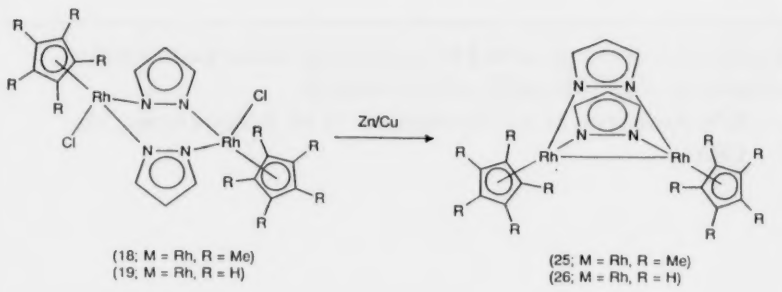
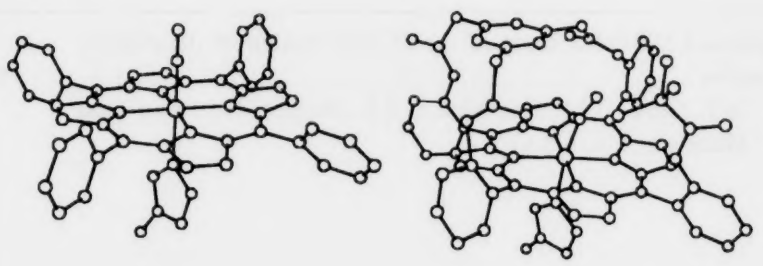
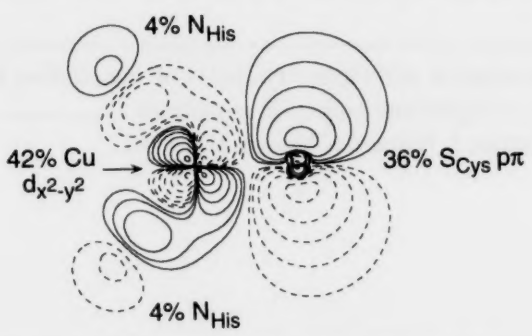
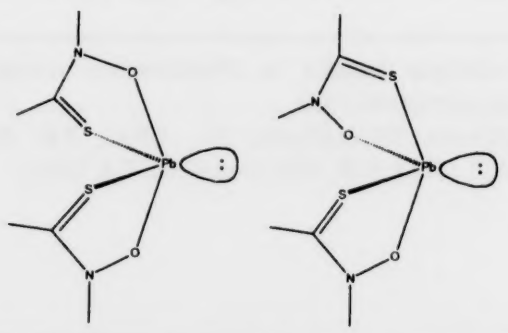
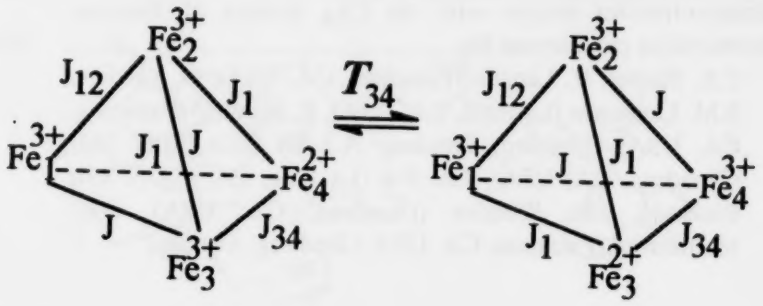
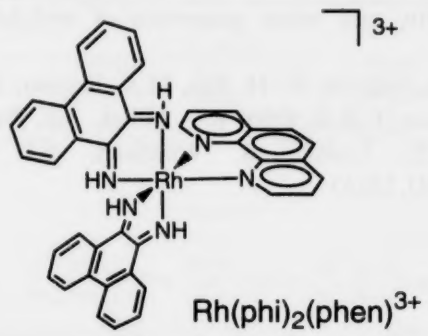
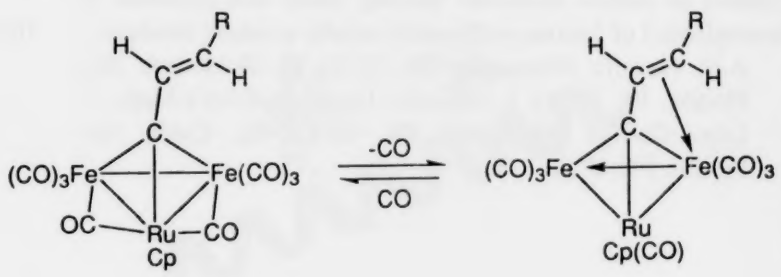
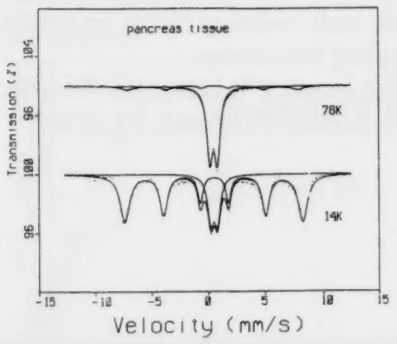
Synthesis, structure, and spectroscopic properties of (nitrito-*O,O'*)[tris[2-(1-methyl)imidazolyl]methoxymethane]copper(II), Cu(II)(TIMM)$(NO_2)_2$ ..... R.T. Stibrany, J.A. Potenza, H.J. Schugar (New Brunswick, NJ, USA)	33	
Electron transfer barriers for ground- and excited-state redox couples: *trans*-dioxo(1,4,8,11-tetramethyl-1,4,8,11-tetraaza-cyclotetradecane) osmium(VI)/osmium(V) ..... C. Kelly, D.J. Szalda, C. Creutz, H.A. Schwarz, N. Sutin (Upton, NY, USA)	39	
Pyrazolyl-bridged iridium dimers. 15. Synthesis of binuclear cyclopentadienyl Ir(III) complexes and the rhodium analogues: reductive access to the bimetal (II) state ..... J.A. Bailey, S.L. Grundy, S.R. Stobart (Victoria, Canada)	47	
Syntheses and characterization of the ruthenium carbonyl porphyrin complexes Ru(TPP)(CO)(1-MeIm) and Ru(α-PocPivP)-(CO)(1-MeIm) ..... C. Slebodnick, W.K. Seok, K. Kim, J.A. Ibers (Evanston, IL, USA)	57	
Electronic structure of the oxidized and reduced blue copper sites: contributions to the electron transfer pathway, reduction potential, and geometry ..... E.I. Solomon, K.W. Penfield, A.A. Gewirth, M.D. Lowery, S.E. Shadle, J.A. Guckert, L.B. LaCroix (Stanford, CA, USA)	67	
Coordination chemistry of bis-thiohydroxamic acids: synthesis and characterization of their lead(II) complexes and stability constant determination ..... S. Rupprecht, K. Langemann, T. Lügger, J.M. McCormick, K.N. Raymond (Berkeley, CA, USA)	79	

An exchange coupling model for the $Fe_4S_4^{3+}$ polymetallic center present in high potential iron-sulfur proteins..... 91 M. Belinskiy (Tel Aviv, Israel), I. Bertini, O. Galas (Florence, Italy), C. Luchinat (Bologna, Italy)	
Excited state properties of $Rh(phi)_2(phen)^{3+}$ and related complexes: a strong photooxidant..... 101 C. Turro, A. Evenzahav, S.H. Bossmann (New York, NY, USA), J.K. Barton (Pasadena, CA, USA), N.J. Turro (New York, NY, USA)	
Reaction of (η-allenyl)dicarbonyl(η^5-cyclopentadienyl)ruthenium with nonacarbonyldiiron: synthesis and characterization of iron-ruthenium mixed-metal products..... 109 C.E. Shuchart (Columbus, OH, USA), M. Calligaris (Trieste, Italy), M.R. Churchill (Buffalo, NY, USA), P. Faleschini (Trieste, Italy), R.F. See (Buffalo, NY, USA), A. Wojcicki (Columbus, OH, USA)	
Biologically significant iron(III) oxyhydroxy polymers: Mössbauer spectroscopic study of ferritin and hemosiderin in pancreas tissue of β-thalassemia/hemoglobin E disease..... 121 J. Webb, T.G. St. Pierre, K.C. Tran, W. Chua-anusorn, D.J. Macey (Murdoch, Australia), P. Pootrakul (Bangkok, Thailand)	
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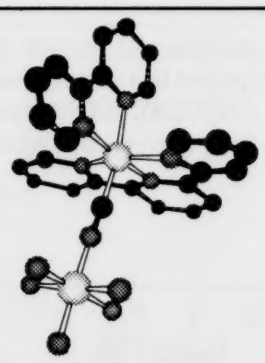
Intramolecular electron transfer in cyanide-bridged ruthenium dimers ..... 135 A. Ponce, M. Bachrach, P.J. Farmer, J.R. Winkler (Pasadena, CA, USA)	

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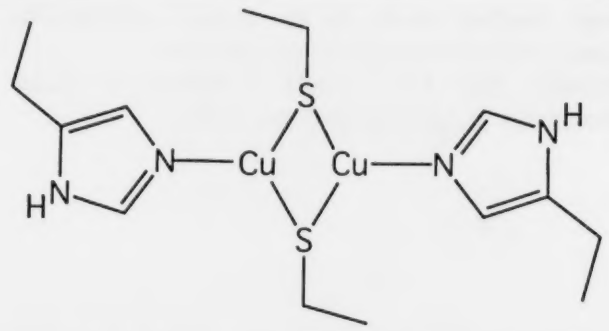

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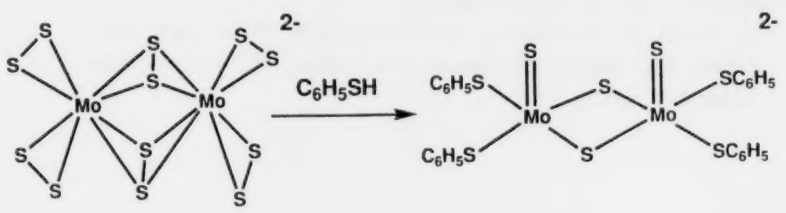

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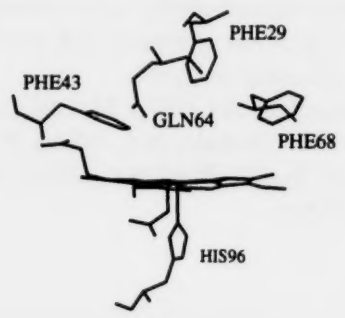

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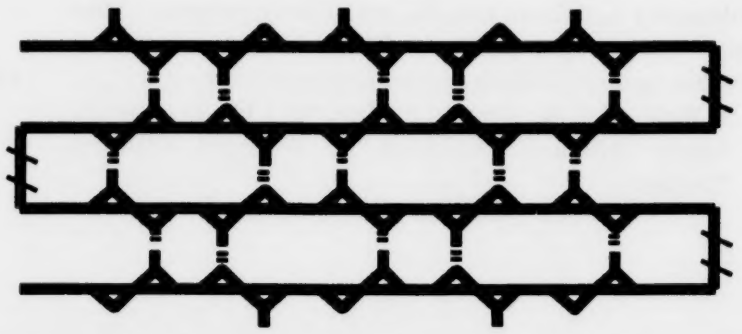

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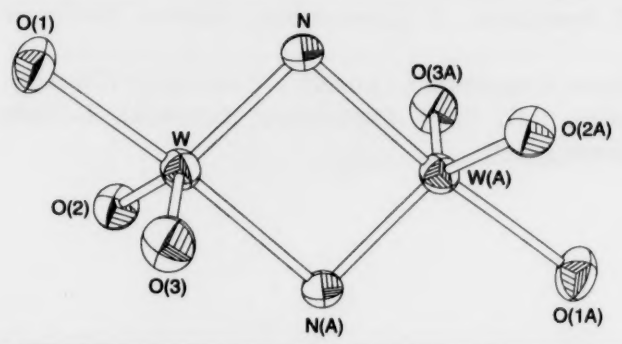

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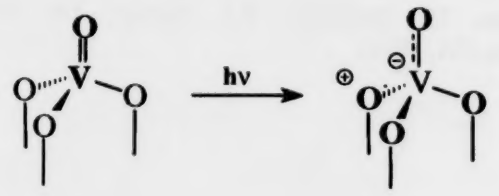

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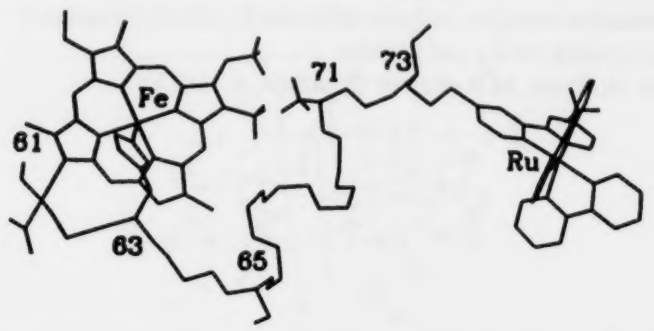

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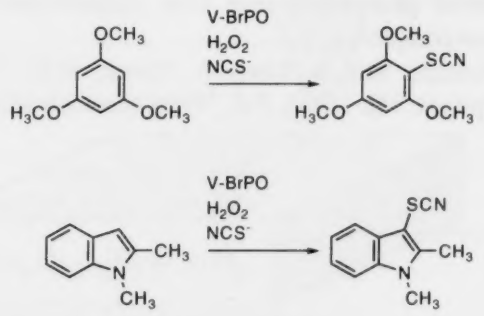

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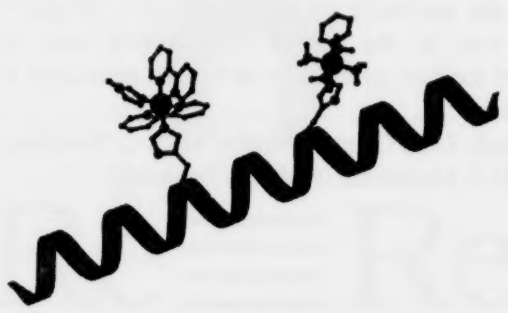

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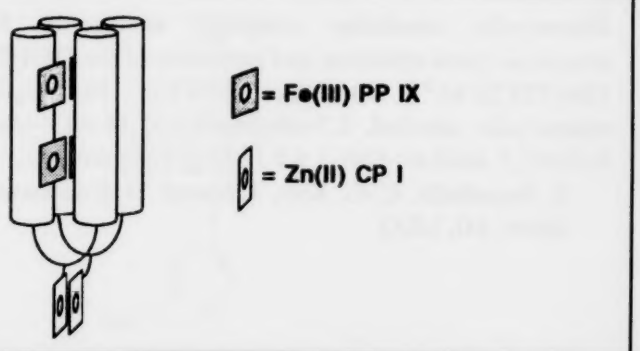

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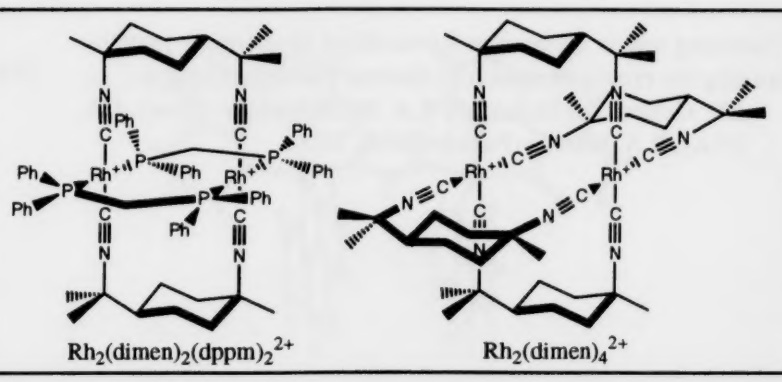

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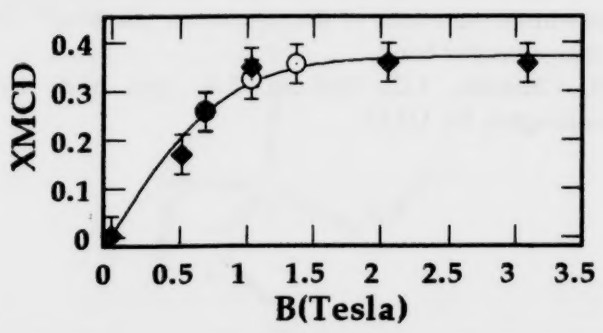
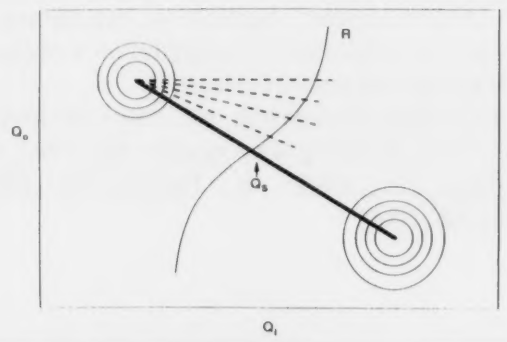
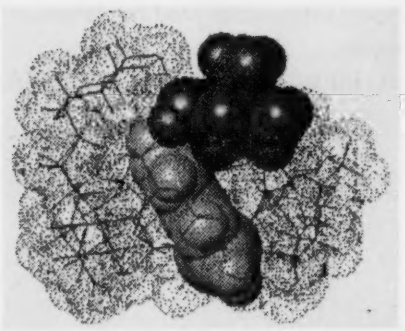


Reorganization energies and rate constants for electron reactions in glass-forming media and proteins ..... B.M. Hoffman, M.A. Ratner (Evanston, IL, USA)	233	
Substrate induced phosphorescence from cyclodextrin·lumophore host-guest complexes ..... W.K. Hartmann, M.H.B. Gray, A. Ponce, D.G. Nocera (Berrien Springs, MI, USA), P.A. Wong (East Lansing, MI, USA)	239	
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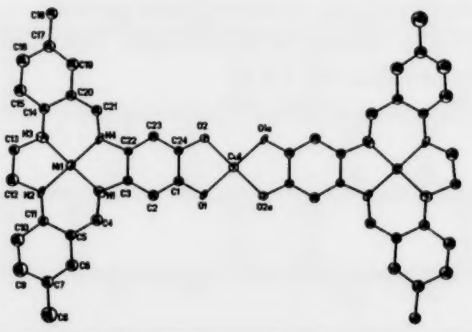
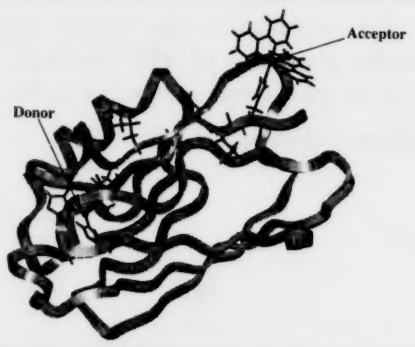
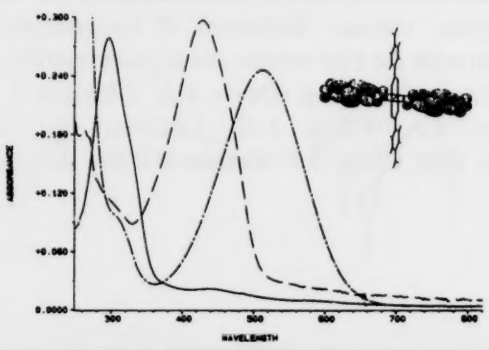
Macrocyclic catecholate complexes as ligands. Synthesis, structural characterization and properties of the $[MH_2ETC]$ and $\{[Ni(ETC)]Cu\}^{2-}$ complexes (M = Co, Ni; H_4ETC = the macrocyclic catechol, 2,3-ethylene-5,6:13,14-di(5′-methylbzo)-9,10-(4′,5′-diolbzo)-[14]-1,4,8,11-[N_4]-7, 12-diene)..... S. Jonasdottir, C.-G. Kim, J. Kampf, D. Coucouvanis (Ann Arbor, MI, USA)	255	
Tunneling matrix element in Ru-modified blue copper proteins: pruning the protein in search of electron transfer pathways..... J.N. Gehlen, Iraj Daizadeh, A.A. Stuchebrukhov (Davis, CA, USA), R.A. Marcus (Pasadena, CA, USA)	271	
Nitro-substituted benzoates of dimolybdenum: the Mo_2^{4+} δ to ligand charge transfer band ..... M.H. Chisholm, J.C. Huffman, S.S. Iyer, M.A. Lynn (Bloomington, IN, USA)	283	

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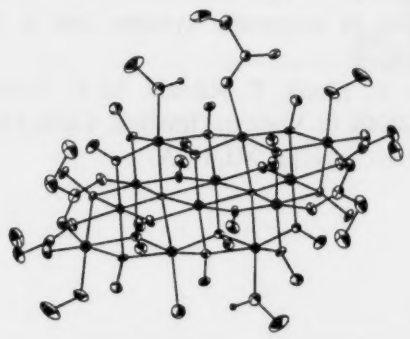

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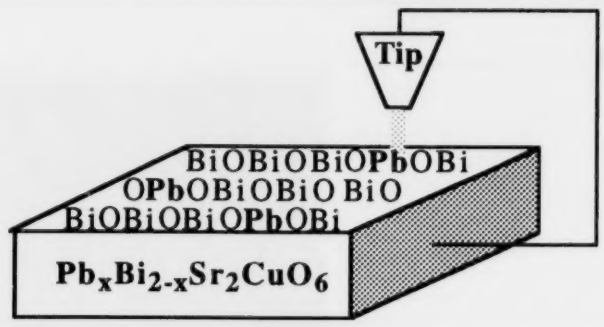

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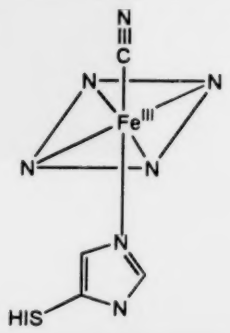
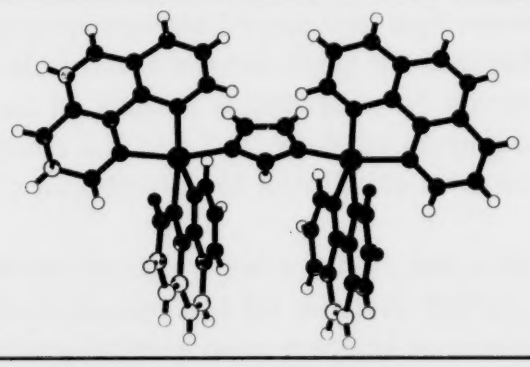
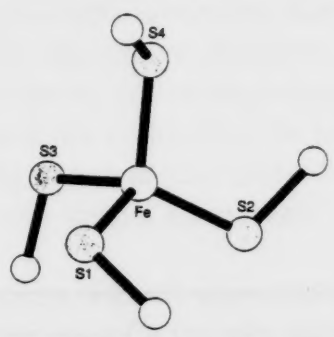


The crystal and molecular structure of μ-imidazolatobis [bis (1–10 phenanthroline)copper(II)] nitrate 327
S.M. Morehouse (Purchase, NY, USA)



Models for the iron-sulfur protein rubredoxin: the use of sterically hindered thiolate ligands to stabilize $[Fe(SR)_4]^-$ complexes; some considerations of the structure of the $[Fe(S\text{-}Cys)_4]$ centers in oxidized rubredoxins 333
M. Millar, J.F. Lee, T. O'Sullivan, S.A. Koch, R. Fikar (Stony Brook, NY, USA)



Dioxygen activation in enzymatic systems and in inorganic models G.T. Babcock, R. Floris, T. Nilsson, M.A. Pressler (East Lansing, MI, USA), C. Varotsis (Iraklion, Crete, Greece), E. Vollenbroek (East Lansing, MI, USA)	345	$4\ \text{cyt}\ c^{2+} + O_2 + 8H^+_{in} \rightarrow 4\ \text{cyt}\ c^{3+} + 2H_2O + 4H^+_{out}$ $O_2 \rightarrow$ "intermediates" $\rightarrow H_2O.$ e^- H^+

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